Appln. No.: 10/583,016 Amendment Dated October 28, 2009 Reply to Office Action of April 28, 2009

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-4. (Canceled)

5. (Currently Amended) The polyester of claim 1, the polyester comprising a unit having the structural formula:

$$[-[A]_m-[B]-[A]_m-[D]-]_x$$

wherein A is a monomeric ring-opened lactone unit selected from the group consisting of Llactide, glycolide, p-dioxanone, lactones of beta-hydroxy acids, lactones of gamma-hydroxy acids, lactones of delta-hydroxy acids, cyclic carbonates, depsipeptide and mixtures of any of thesederived unit;

- -B is the initiating-corea diol residue derived from a diol according to the formula HO- $(R_3)$ -OH wherein  $R_1$  is a member selected from the group consisting of  $C_2$ - $C_{14}$  linear alkanediyl, substituted  $C_2$ - $C_{14}$  alkanediyl having at least one substituent group,  $C_2$ - $C_{14}$  branched alkanediyl and alkanediyl having at least one unsaturated bond<sub>7</sub>:
- -[[C]]D is a diacid residuethe coupling unit;7 and

m is a number of repeats from about 4 to about 60, and x is a number of macromeric units from 1 to about 100.

- 6. (Original) The polyester of claim 5, wherein m is 10 to 40.
- 7. (Currently Amended) The polyester of claim 5, wherein A is represented by at least one of the formulas:

$$-[-(R_2)-C(=O)-O-]-$$
 and  $-[-O-C(=O)-(R_2)-]-$ 

wherein  $R_2$  is at least one of  $C_1$ - $C_8$  alkylalkanediyl and a substituted  $C_1$ - $C_8$  alkylalkanediyl having at least one carbon substituted with an aromatic group and/or a heteroatom.

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- (Currently Amended) The polyester of claim 5, wherein the at-least twomonomeric ringopened lactone derived-units constitute about 10%50wt% to about 99%99wt% of the polyester.
- (Currently Amended) The polyester of claim 8, wherein the at-least twomonomeric ringopened lactone derived—units constitute 59%80wt% to 99%99wt% of the polyester.
- 10. (Currently Amended) The olyesterpolyester of claim 5, wherein the lactone derived unit [A]<sub>m</sub> has a number average molecular weight of about 59 in a range from about 288 to about 12.000.
- (Currently Amended) The polyester of claim 10, wherein the number average molecular weight is 50in a range from 288 to 6,000.
- 12. (Currently Amended) The polyester of claim 10, wherein the number average molecular weight is 50in a range from 288 to 2,000.
- 13. (Canceled)
- 14. (Currently Amended) The polyester of claim 513, wherein R<sub>1</sub> is a member selected from the group consisting of C<sub>6</sub>, C<sub>8</sub>, C<sub>10</sub> and C<sub>12</sub> alkyls<u>alkanedivls</u>, a poly(ether), poly(ethyleneglycol), poly(amine), poly(propyleneoxide), a block ABA copolymer of poly(oxyethylene) and poly(oxypropylene).
- 15. (Original) The polyester of claim 5, wherein D is represented by the formula:

$$[-C(=O)-(R_3)-C(=O)-]$$

wherein  $R_3$  is a  $C_4$ - $C_{10}$  aliphatic or aromatic group.

16. (Currently Amended) The polyester of claim 15, wherein  $R_3$  is a member selected from the group consisting of  $C_4$ ,  $C_6$ ,  $C_8$ , and  $C_{10}$  alkylsalkanediyls.

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- 17. (Currently Amended) The polyester of claim 5±, wherein the polyester has a molecular weight from about 20 KDa to about 120 KDa.
- 18. (Currently Amended) A polyester comprising a macromeric unit, wherein the macromeric unit comprises:
  - (a) at least two lactone derived units;
- (b) an initiating core, wherein a diol derived unit is linking the at least two lactone derived units to form a macromerdiol; and
- (c) a coupling unit, wherein the coupling unit is linking a plurality of macromerdiols and wherein the coupling unit and the diol derived unit have a carbon chain of a length sufficient to alter hydrophobicity of the polyester and thereby enable the polyester to degrade the polyester of claim 5 wherein the polyester is capable of being degraded according to a 25 surface erosion mechanism.
- 19-21. (Canceled)
- 22. (Currently Amended) A process of making the polyester of claim 51, the process comprising:

providing a lactone;

providing a diol;

providing a coupling agent;

- reactingcontacting the lactone with the diol in athe presence of a catalyst to form a macromerdiol; and reactingcontacting the macromerdiol with the coupling agent to form the polyester.
- 23. (Currently Amended) The process of claim 22, wherein the lactone and the diol are provided at a first molar ratio of from about  $5\underline{:}1$  to about  $120\underline{:}1$ .
- 24. (Currently Amended) The process of claim 22, wherein the lactone and the diol are provided at a first molar ratio of about 5:1 to about 60:1.
- (Currently Amended) The process of claim 22, wherein the macrodiol macromerdiol and Page 6 of 18

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the coupling agent are provided at a second molar ratio of about 1:1 to about 20:1.

- 26. (Currently Amended) The process of claim 22, wherein the catalyst is a member selected from the group consisting of <a href="mailto:tin(II)-2">tin(II)-2</a>-ethylhexanoate, aluminum isopropoxide, salts and oxides of yttrium and lanthanide.
- 27. (Currently Amended) The process of claim 22, wherein the lactone is a member selected from the group consisting of lactones of alpha-hydroxy acids\_lactide, glvcolide, p-dioxanone, lactones of beta-hydroxy acids, lactones of omega-hydroxy acids, lactones of gamma-hydroxy acids, lactones of delta-hydroxy acids, lactones of epsilon-hydroxy-acids, p-dioxanone, cyclic carbonates, <a href="mailto:depsilon-hydroxy-acids">depsilon-hydroxy-acids</a>, p-dioxanone, <a href="mailto:depsilon-hydroxy-acids">depsilon-hydroxy-acids</a>, <a href="mailto:depsilon-hydroxy-acids">depsilon-hydroxy-ac
- 28. (Currently Amended) The process of claim 27, wherein the lactone is a member selected from the group consisting of <u>L</u>-lactide, <u>E-caprolactone</u>, propiolactone, butyrolactone, valerolactone, p-dioxanone, <u>glycolide</u>, <u>and</u> depsipeptide, <u>and mixtures of these</u>.
- 29. (Currently Amended) The process of claim 22, wherein the diol has the following structural formula:

HO-(R<sub>1</sub>)-OH

wherein  $R_1$  is a member selected from the group consisting of  $\mathbf{a}$ - $C_2$ - $C_{14}$  linear  $\mathbf{a}$ -lkylalkanediyl, a substituted  $C_2$ - $C_{14}$  alkylalkanediyl having at least one substituent group,  $\mathbf{a}$ - $C_2$ - $C_{14}$  heteroalkylalkanediyl,  $\mathbf{a}$ - $C_2$ - $C_{14}$  branched alkylalkanediyl,  $\mathbf{a}$ -alkylalkanediyl having at least one unsaturated bond, and  $\mathbf{a}$ -polymers.

- 30. (Currently Amended) The process of claim 29, wherein  $R_1$  is a member selected from the group consisting of  $C_6$ ,  $C_8$ ,  $C_{10}$  and  $C_{12}$  alkylsalkanediyl, a-polyethers, poly(ethylene\_glycol), polyamines, poly(propylene\_oxide), and\_block ABA copolymers of poly(oxyethylene) and poly(oxypropylene).
- 31. (Original) The process of claim 22, wherein the coupling agent is an acyl halide.

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- 32. (Currently Amended) The process of claim 31, wherein the coupling agent is a diacyl chloride derived from adipic acid, suberoicsuberic acid, sebacic acid, or dodecanoicdodecanedioic acid.
- 33. (Currently Amended) A device manufactured from the polyester of claim 51.
- 34. (Original) The device of claim 33, wherein at least a part of the device is adapted to be implanted in a body.
- 35. (Original) The device of claim 33, wherein the at least a part of the device is adapted to deliver a bioactive agent.
- 36. (Currently Amended) The device of claim 35, wherein the bioactive gentagent is a member selected from the group consisting of an antibody, a viral vector, a growth factor, a bioactive polypeptide, a polynucleotide coding for the bioactive polypeptide, a cell regulatory small molecule, a peptide, a protein, an oligonucleotide, a gene therapy agent, a gene transfection vector, a receptor, a cell, a drug, a drug delivering agent, nitric oxide, an antimicrobial agent, an antibiotic, an antimitotic, an antisecretory agent, an anti-cancer chemotherapeutic agent, steroidal and non-steroidal anti-inflammatories, a hormone, an extracellular matrix, a free radical scavenger, an iron chelator, an antioxidant, an imaging agent, and a radiotherapeutic agent.